economic trends

November 2012

Growth in a low inflation environment

Alberta's economy is forecast to expand by 3.7% in 2012, according to the Mid-year Fiscal Update and Economic Statement. This is nearly double the national and US growth forecasts, and comes on the heels of a more than 5% increase in 2011 (see box below). Typically growth of this magnitude is associated with elevated inflation, yet Alberta's inflation rate has been unusually low at under 1.5% since April. Slack in the rest of the Canadian and global economy, energy price declines, and a high Canadian dollar have all helped keep inflation contained.

Moving into 2013, Alberta is transitioning into a period of more moderate and sustainable growth. Many economic indicators have posted slower growth rates in the second half of this year, and some oil sands producers have outlined a more cautious approach to investment.

Key Indicators — All indicators seasonally adjusted unless otherwise indicated.

Indicator	Latest Month	Value	Change year-over-year (y/y)
Employment (thousands)	October	2,161	1.7%
Unemployment Rate	October	4.5%	-0.6p.p.
CPI Inflation	October	0.6%	-2.8 p.p.
Retail Sales	September	$5.9B	+8.5%
Housing Starts (annualized)	October	33,100	0.3%
Rigs Drilling (unadjusted)	November	258	-21.8%
Manufacturing Shipments	September	$6.4B	+1.9%
Exports (unadjusted)	September	$7.2B	-9.0%

Source: Statistics Canada, CAODC, CMHC. p.p. = percentage points.

Global Economy

Amid uncertainty, US economy showing signs of improvement

In the US, uncertainty over the fiscal situation is weighing on business investment and hiring. A failure to prevent the "fiscal cliff" of looming spending cuts and tax increases could push the US economy back into recession in 2013.

However, there are some positive economic signs emerging. Housing starts hit a four-year high in October, employment gains in recent months have gained strength, and third quarter real GDP growth accelerated to 2.7% (though much of this was due to higher inventories).

Canadian economic growth cools

Canadian real GDP increased by 0.6% in the third quarter, the slowest quarterly growth rate in more than a year. Growth has been below 2% in each quarter of 2012, marking the first time since the recession that there have been three consecutive quarters of sub-2% growth.

Anemic growth can be seen in a broad range of indicators. September's year-over-year growth in wholesale trade, manufacturing shipments and merchandise exports was at the lowest level in three years. Some of the recent moderation is due to weak price growth, reflecting declines in commodity prices and weak increases in overall output prices.

Price effects matter for government finances. As a consequence of the slowdown in nominal GDP growth, the Department of Finance Canada revised down its 2011-12 revenue forecast by $2.8 billion, and revised up its deficit forecast by $1.4 billion.

Alberta led the country in economic growth in 2011

Exports propel growth

According to the recently released Provincial Economic Accounts, Alberta's real GDP growth led all provinces at 5.1%, the province's largest expansion since 2006. Net exports contributed the most to growth in 2011, with exports (+9.2%)increasing at a much faster rate than imports (+2.8%). An 11.4% gain in non-residential business investment was also an important factor in Alberta's impressive GDP growth.

Strong growth in wages and salaries helped to support household consumption, which increased 3.4%. Subtracting from growth was government and residential investment. Government investment declined by 5.3% partly due to the winding down of the federal stimulus program, while residential investment declined by 5.2%, as relatively high inventories and poor weather conditions in early 2011 weighed on housing starts.

2010 revised higher

Accompanying the release of the 2011 Provincial Economic Accounts were revisions to GDP for 2007-2010. Real GDP growth in 2010 was revised markedly higher, from 3.3% to 4.0% while 2009 growth was also revised up slightly, from -4.5% to -4.4%.

Business Sector

Alberta's business sector has moved into a period of more modest growth in some key indicators. Exports have been tracking below last year's levels for two straight months, while the number of rigs drilling remains well below 2011 on weaker gas activity. Other indicators have remained strong: higher crop sales have pushed farm cash receipts 15% above last year's levels in the first three quarters, while the value of manufacturing shipments hit a 10 month high in September.

Supply disruption weigh on exports

Merchandise exports fell to the lowest level in a year and a half in September, falling by 9% over the same time last year. While most categories dipped, energy products accounted for more than 60% of the year-over-year drop.

Maintenance activities and weather-related problems at oil sands' facility likely contributed to lower energy exports. In addition to these temporary supply disruptions, lower natural gas exports and prices continue to weigh on nominal energy exports.

Manufacturing shipments hit 10-month high

Manufacturing shipments grew to the highest level since November 2011 in September, mainly propelled by higher petroleum & coal and chemical product manufacturing. While shipments improved overall, food manufacturing fell to the lowest level in eight months, which likely reflects the effect of the temporary shutdown at the Brooks XL Foods meat packing plant that began near the end of September.

Oil sands producers signal more cautious approach to investment

Since August, some oil sands producers have announced cost savings at major projects and plans to trim capital spending plans. Reasons cited include costs and competitive markets amid the sharp rise in US oil production. Companies have signalled that they will focus their effort on the most profitable growth opportunities.

Construction cost inflation moderates

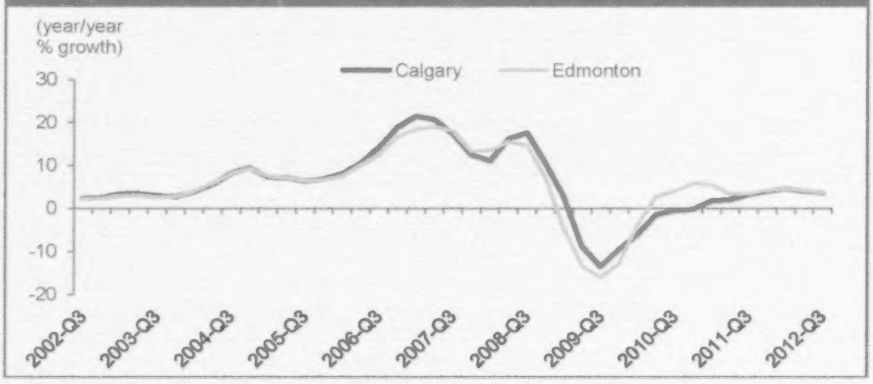
In Calgary and Edmonton, non-residential building construction cost inflation decelerated for the second quarter in a row, coming in at 3.5% y/y. Costs are increasing at rate that is below the 10-year average of just over 5% (Chart 1).

Household Sector

Alberta continues to churn out jobs; public sector now adding to gains

Alberta added 5,000 jobs in October, the eighth month of job gains this year. So far this year, the province has created 58,600 jobs. Public sector employment has boosted this year's job growth (8,300, year-to-date), and is now just shy of its pre-recession peak. Alberta's year-to-date job growth continues to lead the country at 2.8%, and the unemployment rate remained the lowest in Canada for the seventh straight month at 4.5% in October. With employment now growing off elevated levels from late 2011, the year- over-year pace of job growth has eased to below 2% in the last two months.

Chart 1: Non-Residential Building Construction Cost Index



Source: Statistics Canada.

Alberta shoppers continue to lead the country in spending growth

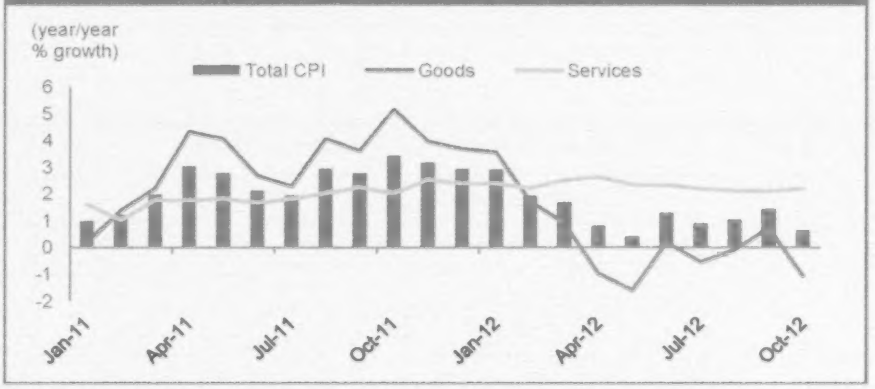
Alberta retail sales jumped an impressive 1.7% in September to a new high of $5.9 billion. The province is leading the country in year-over-year growth at 8.5% and year-to-date growth at 8.9%. Retail sales growth this year has been fueled by vehicle purchases and home related purchases such as furniture and building materials. In general, Albertans are shopping with confidence because of a robust labour market and rising wages. Nation-leading population growth is also contributing to higher sales.

Earnings grow during a period of low inflation

Albertans continue to see their average earnings grow at a faster rate than inflation. Average weekly earnings (AWE) are up 3.2% so far this year, thanks to higher hourly wages and a longer average work week. With average hours worked near historic highs, AWE growth in the coming months will likely come from gains in hourly earnings as opposed to longer hours.

The province continues to see very mild consumer price inflation this year, staying below 1.4% each month since April. In October, plunging electricity prices pushed Alberta's inflation rate to a meager 0.6%, a six month low. The province has the lowest inflation rate year-to-date in the country at 1.3%. Inflation has been held back in 2012 by falling energy prices as well as weak growth in other goods' prices (Chart 2). This partly reflects the effects of a high Canadian dollar, which has lowered import prices, and a sluggish global economy.

Chart 2: Alberta's Consumer Price Index (CPI)



Source: Statistics Canada

Alberta's oil and gas extraction industry: its role and linkages in the economy

By many measures, the oil and gas extraction industry plays a critical role in Alberta's economy. This InFocus investigates the direct impact the industry has on Alberta's economy, as well as the indirect impact it has on the many Alberta industries that provide it with inputs.

Measuring the Contribution

Direct contributions to Alberta's economy

The oil and gas extraction industry is a significant contributor to Alberta's economy by many measures, from investment to exports to GDP. Although the industry has a relatively small share of direct employment in Alberta due to its capital-intensive nature, it has the largest share of output among Alberta's major industries. It contributed around one-quarter of Alberta's GDP between 2002 and 2011 (Chart 1). The industry is a major source of investment in the province, accounting for around 44% of Alberta's total capital expenditure over the last ten years. Moreover, the industry's international exports have more than doubled from $28.5B in 2002 to $63.4B in 2011, increasing as a share of Alberta's total goods exports from 58% to 68%.

Oil and gas extraction: an economic driver

In addition to the large direct contribution to Alberta's economy, the oil and gas extraction industry acts as a driver of economic activity. As the industry has undergone rapid expansion, its demand for goods and services has increased. This has benefitted the many industries that feed into the oil and gas extraction industry.

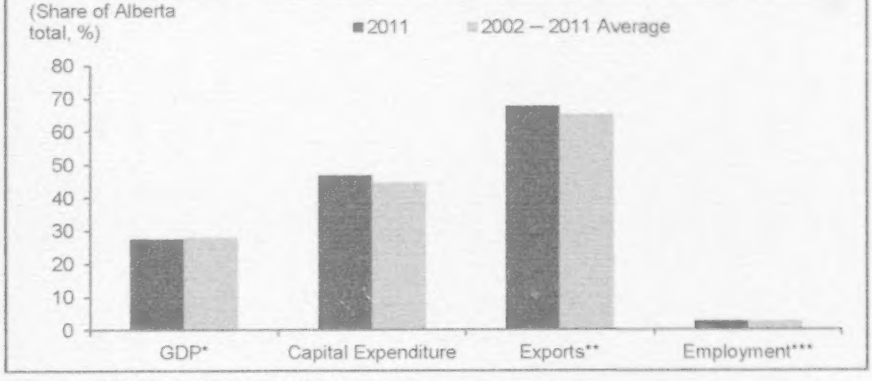
Alberta Treasury Board and Finance has developed an Input-Output (I/O) model, using I/O tables from Statistics Canada, to capture the supply chain linkages among industries in the Alberta economy (see blue box). With this model, it is possible to quantify the economic impact the oil and gas extraction sector has on other industries that provide it with goods and services.

Direct and indirect impacts

According to the I/O model, $1 in output from the oil and gas extraction sector is associated with $0.87 of GDP (excluding indirect impacts on the industry itself). This includes $0.11 of indirect GDP from those industries that support the oil and gas extraction industry by providing it with goods and services.

Chart 2 demonstrates the allocation of indirect GDP associated the oil and gas extraction industry. Not surprisingly, businesses that benefit the most from increased activity in oil and gas extraction are engaged in support activities, such as contract drilling

Chart 1: Direct Measures of Oil and Gas Extraction's Contribution to Alberta's Economy



Source: Statistics Canada, Industry Canada

* Based on current prices. Includes mining, which is a relatively small component for Alberta.

** International exports of crude and natural gas as share of total goods exports.

*** Since oil and gas extraction is a highly capital-intensive process, this limits the industry's direct impact on employment.

The Alberta Input-Output Model

Alberta Treasury Board and Finance has developed an Input-Output (I/O) model that captures the industrial structure of the Alberta economy at a point in time, using the most recent I/O provincial data from Statistics Canada. This InFocus is based on the latest year available 2008.

The model only looks at backward, input linkages; therefore, this analysis focuses on the suppliers to the oil and gas extraction industry. It does not include the economic impacts associated with the oil and gas extraction industry as an input provider for other industries (for example, the refining sector). The economic impacts include those associated with output from the oil and gas industry (direct impacts) and those industries that supply the oil and gas industry with input (indirect impacts).

Definitions

The Oil and Gas Extraction Industry

This industry captures the operational activities associated with the exploration and production of oil and gas. This includes conventional and non-conventional extraction and upgrading in an integrated facility.

The Oil and Gas Engineering Construction Industry

This industry captures activities associated with the construction of major oil and gas-related assets, including oil refineries, natural gas processing plants, and oil and gas pipelines.

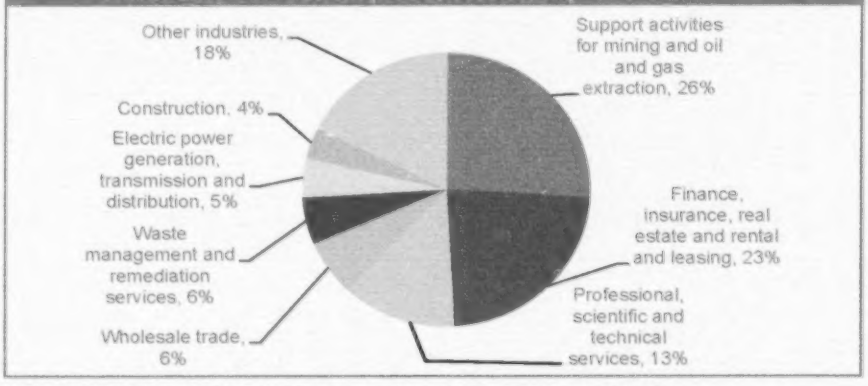
Industry "Output" versus "GDP"

Output measures the total value of gross production, while GDP (or industry value-added) measures the value of production less the value of inputs from other industries.

and service companies. This industry is the largest provider of inputs to the oil and gas extraction sector and makes up 26% of the indirect GDP allocated to the input-providing industries (see Chart 2).

The finance, insurance, real estate and rental and leasing industry is also a large contributor to indirect GDP at 23%. This industry provides services such as financial transactions and the acquisition of fixed assets. Other notable indirect GDP contributors include professional, scientific and technical services (13%); wholesale trade (6%); waste management and remediation services (6%); and electric power generation, transmission and distribution (5%).

Chart 2: Oil and Gas Extraction: Indirect GDP impacts on other industries in Alberta (2008, % of total)*


Other industries, 18%
Support activities for mining and oil and gas extraction, 26%
Construction, 4%
Electric power generation, transmission and distribution, 5%
Finance, insurance, real estate and rental and leasing, 23%
Waste management and remediation services, 6%
Professional, scientific and technical services, 13%
Wholesale trade, 6%

Source: Alberta Treasury Board and Finance; *excludes indirect impacts on the industry itself.

Strong indirect employment impacts

The oil and gas extraction industry's employment impacts are mainly indirect, associated with the industries that supply it with goods and services. The ratio of indirect to direct jobs is around 2:1. This means that for every job required to increase output in the oil and gas extraction industry, there are two jobs required from supporting industries.

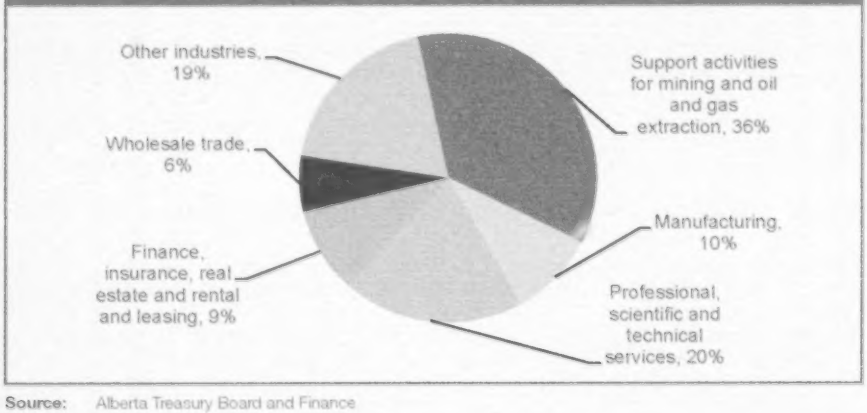
Additional Indirect Linkages

Since the oil and gas extraction industry focuses on the operating aspect of oil and gas field activities, it does not capture much of the capital investment that goes towards the development of oil and gas resources. In order to get a more complete picture, it is important to look at other industries where this activity takes place. Much of this investment is captured in the oil and gas engineering construction industry, which encompasses activities associated with the construction of facilities relating to production and pipeline transport.

The oil and gas engineering construction industry has seen considerable growth over the past 10 years, particularly related to employment and output. Employment in the industry as a portion of total employment in Alberta grew from 4% in 2002 to 6% in 2011.

On average, $1 of output in the oil and gas engineering construction industry is associated with $0.70 GDP in Alberta, of which almost half is indirect GDP. As shown in Chart 3, the largest contributor of this indirect GDP is support activities for mining and oil and gas extraction industry (36% share); followed by professional, scientific and technical services industry (20%), and the manufacturing sector (10%). More than half of the contribution from manufacturing is attributed to primary metal manufacturing and fabricated metal products manufacturing.

Chart 3: Oil and Gas Engineering Construction: Indirect GDP impacts on other industries in Alberta (2008, % of total)


Other industries, 19%
Support activities for mining and oil and gas extraction, 36%
Wholesale trade, 6%
Manufacturing, 10%
Finance, insurance, real estate and rental and leasing, 9%
Professional, scientific and technical services, 20%

Source: Alberta Treasury Board and Finance

Conclusion

The oil and gas extraction industry plays a critical role in Alberta's economy, accounting for over half of Alberta's total exports in 2011, and about one-quarter of its GDP over the past ten years. However, the importance of this industry to the province's economy is further highlighted when taking into account the inter-industry supply linkages that exist between the oil and gas extraction industry and other industries in Alberta. This InFocus examines exclusively the input linkages, namely the Alberta businesses that provide the materials and services demanded by the oil and gas extraction industry, and how they indirectly impact Alberta's economy. The analysis reveals how closely integrated the oil and gas extraction industry is with many other industries operating in Alberta.

Contact:

Owen Jung	*780.427.8840*
Catherine Rothrock	*780.427.2758*
Samson Amusen	*780.643.1074*